Original/Duplicate/Triplicate

CONTRACT CERTIFICATE

Job Code Number: 004-18-000054

No. Est. & Part bill Date:

Division: Project:

Budget Head :

Est Cost: **200.00 Lacs**

Bill Received No. Date..... Cash Book Voucher No..... dated.....

Scheduled Docted No.

Name of Work (as per sanctioned estimate) **PROVIDING ELECTRIFICATION WORKS AND AMENITES FOR ALLALSANDRA SWIMMING POOL IN WARD NO 4**

Name of Contractor and Full Address: **M/S. KRIDL , Bangalore**

Reference to Agreement No. **EE(Project)/YNK Zone/AG/137 /2017-18 Dated: 05-03-2018**

Certified that the measurement were taken by me on 05-05-18 and recorded of pages 18045 to 18056 of measurement Book No 06/17-18 and that the work is satisfactorily executed.

Officer-In-Charge of work

Assistant Executive Engineer
Byatarayanapura Sub-division
KRIDL, BBMP, Bangalore

Certified that the measurements were taken by me on 05.05.18 And found correct.

Certified that the quantities of materials shown in column 3 of Account II have been actually brought to site of the

Sub Division Officer

Assistant Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Memorandum of Payment		
1) Total value of work done or supplies made as per account within		
2) Deduct amount to be held in reserve being.....percent Rs.....		
3) Deduct amount to be held in Balance		
4) Deduct Payments:		
a) Amount of previous payment as in the office Cash Book Voucher No.....Dated .....S.D No.....	T&Part:	1,56,64,509 -
Amount adjusted towards cash advance recovery of	2% IT	3,13,290 -
b) Payments for store or other materials supplied	1% LC	1,56,645 -
Now made recovery of amount creditable to this/other work	0.1% CBF	15,665 -
Amount paid on this bill Cheque/Cash	LR	85,226 -
5) Balance being unpaid value of work done held in reserve	S.D	7,83,225 -
6) Deduct part advance made on the Office Cash Book Voucher No..... dated..... less adjustments	T/D	13,54,051 -
7) Net amount due to or from contractor	payable:	1,43,10,458 -
Unadjusted items		
8) Advance to contractor for materials brought to site (as detailed) with Value of Government materials supplied		

Contractor's Signature

Assistant Executive Engineer
Byatarayanapura Sub-division
KRIDL, BBMP, Bangalore

Received Rs.....(in words).....

by cash and by adjustment of Payment as per memorandum.

Witnesses:

1

2

Dated

Stamp

Assistant Executive Engineer
Byatarayanapura Sub-division
KRIDL, BBMP, Bangalore

Signature of Contractor

Paid by me by cheque No.....dated.....

Cast Rs.....dated.....

Initials of Officer making payment

(For use in the Office)

Audited & Admitted for Rs. 1,56,64,509/-

1,43,10,458/- by Cheque

and Rs. 13,54,051/- by Adjustment

Executive Engineer

Accts. Supdt.
Project Division
B.B.M.P.

Exe. Engineer
Project Division
B.B.M.P

Item no	Description of work	Uni
1	Supplying and running of Copper strips for grounding connections, using necessary fixing materials as required. 25x3mm Copper strip directions of the Engineer-In-charge of the work .item no 7.3.6 page 55	Rmt
2	Supplying and running of Copper strips for grounding connections, using necessary fixing materials as required. 25x6mm Copper strip directions of the Engineer-In-charge of the work.item no 7.3.7 page 55	Rmt
3	Supplying and running of GI strips for grounding connections, using necessary fixing materials as required.25x3mm GI strip directions of the Engineer-In-charge of the work.item no 7.3.1 page 55	Rmt
4	PART C:-L.T Panel boards and distribution boards 1.0) Main LT Panel "Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete.	sqcm
5	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.6.39.5) 75x150x75x6mm C channel directions of the Engineer-In-charge of the work .item no 6.39.5. page no 49	Rmt
6	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) FOUR POLE200Amps 35kA.(Incoming) directions of the Engineer-In-charge of the work.	Each
7	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) FOUR POLE125-160Amps 25kA.(Outgoing) directions of the Engineer-In-charge of the work	Each
8	Supplying and fixing of Shunt trip suitable for MCCB.CBCT. directions of the Engineer-In-charge of the work.	Each
9	Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 220v A.C. 50 Hz 12/24v D.C. directions of the Engineer-In-charge of the work.item no 6.36 page no 48	Each
10	Supplying, fixing and wiring rotary selector switch suitable for Voltmeter. directions of the Engineer-In-charge of the work.Item no 6.26 page no 48	Each
11	Supplying of multi function digital meter with three line back light LCD type display for voltage, Current, frequency, Power, power factor, KVA, KWH,KVAR suitable for 3 phase, 4 wire LT network with IP 54 degree of protection and completely wired as required with communication Port and Class 0.5s accuracy. directions of the Engineer-In-charge of the work .item no 6.31 page no 48	Each
12	Supplying, fixing and wiring 50/5 to 400/5Amps 5VA burden Current Transformer. Class 0.5 accuracy with Tape Wound. directions of the Engineer-In-charge of the work. item no 6.32page no 48	Each
13	Supplying, fixing and wiring earth leakage relay with core balanced current transformer suitable for single phase 50 Hz AC with latest microcontroller based, digital readout of percentage leakage current, programmable delay/auto/manual reset facility suitable to mount on DIN rail/ flush mounting on panel board. directions of the Engineer-In-charge of the work. item no 6.19 page no 47	Each
14	Supplying ..... amps rated 3phase with neutral bus bar using required capacity electrolytic aluminum strips covered with heat shrinkable coloured PVC sleeve, mounted on phenolic/FRP/DMC insulator which are mounted on powder coated 40x6mm M.S.flat frame work in existing panel board. The bus bar shall have suitable holes for termination of incoming and outgoing cables as per IS specification with necessary bolts, nuts and washers etc., complete.6.38.2) 250Amps 4x30x10mm Aluminum Strips directions of the Engineer-In-charge of the work. item no 6.38.2 page no 49	Each

App. Qty	Previous		Present			Total up to date	
	Qnty	Amount	Qnty	Rate	Amount	Qnty	Amount
53.00				523.00			
12.00				1018.00			
109.00				77.00			
234850.00				0.37			
8.00				791.00			
1.00				9877.00			
3.00				5406.00			
4.00				1486.00			
9.00				442.00			
2.00				140.00			
2.00				8003.00			
6.00				483.00			
1.00				7998.00			
6.00				2942.00			

Item no	Description of work	Unit
15	Supplying, fixing and wiring heavy duty low voltage capacitors conforming to IS 2834. 3 phase, 400/440 volts grade, for power factor improvement of rotating machinery. directions of the Engineer-In-charge of the work. item 6.35 page no 48	Each
16	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.6.12.1) 25Amps directions of the Engineer-In-charge of the work. item 6.12.1 page no 45	Each
17	Supplying, fixing and wiring Automatic Power Factor controller fully, static units controlled by 14 stage microprocessor operation, relays LED display, self programming function for power stages and operating logic checking facility for healthy and efficient of each individual capacitor bank, measurement of network harmonics with indication when limit values are exceeded, Comprehensive displays with large, three place LED display, Long term memory for settings, protection for over voltage, power factor correction fault and no voltage, to connect / disconnect banks, with automatic recognition or with standard programs. directions of the Engineer-In-charge of the work . item 6.37 page no 49	Each
18	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 40-63 Amps TPN (Outgoing) directions of the Engineer-In-charge of the work. item no 6.16.6 page no 47	Each
19	Supplying fully automatic star-delta starter unit push button type with suitable wires, 3 contactors, one adjustable thermal timer mounted on a common base plate held in steel enclosure for use on 400/440 volts 3 phase and wired after fixing to the existing wooden board for motor.6.2.1) Upto 12.5 HP directions of the Engineer-In-charge of the work . item 6.2.1 page no 44	Each
20	3.0) MCB Distribution BoardsSupplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.III - Double Door6.17.7) 4Way TP &N directions of the Engineer-In-charge of the work . item no	Each
21	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box.12 Module directions of the Engineer-In-charge of the work. item no 13.6.6 page no 16	Each
22	Fixing charges of post top/ Gate/ Garden fitting /LED on the existing CI / GI or any other pipe using required size of reducer, wiring using suitable wires. Item no 17.6 page no 108	Each
23	D.G.Set and its accessories Supplying, erection, testing and commissioning of .....KVA Diesel Generating Set on existing CC platform Comprising of Diesel Engine Developing ..... BHP @ 1500 RPM confirming to BS 5514.The engine should be turbocharged, Air/water cooled with 10 % over load for 1hour in every 12 hours of operation coupled to suitable capacity alternator rated at 415V, 0.8 PF(lag) 50 Hz, 3 phase, 4 wire system, confirming to BS 5000/IS 4722. The alternator shall be of brushless type ,Screen protected, revolving field, Mounted on suitable Channel Iron Base Frame, Complete with suitable capacity Fuel Tank, required nos. of Batteries of 12/24V as per requirement, Acoustic enclosure as per CPCB Approved Norms. 13.1.1 62.5kva/50kw. item no 13.1.1 page no 91	Each

App. Qty	Previous		Present			Total up to date	
	Qnty	Amount	Qnty	Rate	Amount	Qnty	Amount
20.00				414.00			
4.00				1303.00			
1.00				18660.00			
9.00				1936.00			
4.00				6583.00			
3.00				2399.00			
2.00				267.00			
6.00				145.00			
1.00				572400.00			

Item no	Description of work	Unit
24	Fabricating, supplying and erecting swaged tubular pole of height ...Mtr having three sections, and providing two coats of red oxide paint and finished with two coats of enameled paint of approved quality and colour and M.S. base plate of suitable size welded at the bottom of the pole(as per IS) and 40mm dia GI / flexible PVC pipe of 1 mtr length fitted to the heavy gauge polycarbonate control box including 5way connector of size 167x125x82mm for 7.5M pole/200x160x98mm for remaining length of pole with front opening cover, with locking arrangements and suitable capacity MCB / DP switch, The pole shall be erected in cement concrete work (1:2:4) including excavation and refilling of planting depth of the pole to the ground level and the coping CC shall be up to 0.6M above ground level as per IS 2713 - 7. Erection of heavy duty pole on Footpath / median 10Mt (5Mt Hb,165.1mm dia 4.85mm thick x3M Hm, 139.7mm dia 4.50mm thick x 2M Ht,114.3mm dia 3.65mm thick) as per IS 410 SP 47. item no 5.13.1.2 page no 34	Each
25	Supplying of LED Floodlight with .....W System Power consumption pressure die cast aluminum housing with powder coating with IP 65 protection. 1, 200-275V voltage with electronic Driver, PF>0.9, should meet ANSI 2G Vibration test, Compliance to UL/CE with Class I. System rating shall be 50K hrs. @ Lumen maintenance of 70%, system efficacy > 80lm/w. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer.LED Floodlight 150W. item no 4.37.4 page no 28	No
26	LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI 75+. housing with supplier word mark / name shall be engraved / Embossing on the die cast housing / body part. . Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacturer. Suitable for A1/A2 Roads as per IS 1944 Part I & Part II.90 Watts.item no 7.4.4 page no 55	No
27	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A.4 core 16 sqmm item no 6.41 page no 50	Rmt
28	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with	Rmt
29	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct.6 sqmm to 16 sqmm.item no 7.81 page no	Rmt
30	25 sqmm to 75 sqmm	Rmt
31	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7)In soil (ordinary) item no 7.91 page no 62	Rmt
32	LED Post Top Lantern GARDEN.Supply of LED Post Top Lantern with system ... wattage, housing & frame shall be of powder coated, die cast aluminum, diffuser with high density polyethylene IP65 EPDM Gasket. Life 50000 Hrs. @ L70 shall be conforming to IS 10322/Part 5/ Section 5 @ 230V. 5 years Warranty against any manufacturing defect working under standard electrical condition LED Post Top Lantern with 24 watts. item no 4.34.2 page no 26	No

App. Qty	Previous		Present			Total up to date	
	Qnty	Amount	Qnty	Rate	Amount	Qnty	Amount
12.00				19000.00			
16.00				23577.00			
4.00				31250.00			
300.00				140.40			
205.00				270.00			
300.00				10.80			
205.00				16.20			
200.00				78.00			
6.00				15930.00			

Item no	Description of work	Unit
33	Supply of LED Square Recessed Down lighter with 18W System Wattage. Housing shall be with powder coated pressure die cast aluminum alloy with corrosion resistant polyester powder coat & with extended heat sink. Diffuser/cover made of Lexan plastic material. Rated life shall be L70 @ 50000 Hrs. which shall has inbuilt electrical protection like over/under voltage, short circuit, overload, open circuit & miswiring. Driver is on constant current driver output driver @ 0.06A with PF > 0.9 with line voltage @ 220-240V @ 50/60Hz, driver efficiency > 85% & THD<15%. LED Efficiency > 130 lm/W at 1W & Fixture Efficiency >75lm/w with CRI > 75 with injection moulded Polycarbonate lens. 5 years Warranty against any manufacturing defect working under standard electrical condition. item no 4.32 page no 25	Rmt
34	Open Conduit System Supplying heavy gauge PVC conduit pipe .....dia .....mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.25mm dia 2mm thick. item no 1.12 page no 70	Rmt
35	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A.1.5 sqmm.	Rmt
36	2.5 sqmm	Rmt
37	Supplying and fixing surface/flush mounting unbreakable PVC modular box suitable for mounting modular switch plates with due groove cutting in Brick/C.C wall, including necessary rawl plugs, Machine/NF screws etc., complete.10-12Way. item no 3.4.4 page no 15	Rmt
38	Supplying and fixing of modular switch/ Socket/stepped electronic fan regulator/ dimmer/telephone socket etc on existing modular switch plate as per IS 3854 and IS 1293 GROUP A 6Amps one way. item no 3.7A.1 page no 16	No
39	Laying of UG Cables by trenchless technology by adopting horizontal boring & Drawing of cable including preparation at site With HDPE Pipe iii) Normal soil 6'' bore size item no 48.3 page no	Rmt
40	GI Pipes B - ClassGI Pipe - 150 mm Dia Dia 768058 directions of the Engineer-In-charge of the work	Rmt
41	Earth work excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specification with all lead and lift and directions of the Engineer-In-charge of the work . Item no 2.4 page no 5 SR	cum
42	Providing and Spreading of Sand with all lead and lift and directions of the Engineer-In-charge of the	cum
43	Providing and filling in foundation with granite / trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift complete as per specification. with all lead and lift and directions of the Engineer-In-charge of the work	cum
44	Providing and laying in position Plain Cement Concrete of mix 1:3:6 with OPC cement @ 220kgs ,with 40mm and down size graded granite metal coarse aggregates @ 0 .892 cum and fine aggregates @ 0.465cum machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, in foundation including cost of all materials,labour, HOM of machinery ,curing complete as per specifications.	cum

App. Qty	Previous		Present			Total up to date	
	Qnty	Amount	Qnty	Rate	Amount	Qnty	Amount
10.00				4945.00			
120.00				70.00			
150.00				18.60			
300.00				29.20			
1.00				152.00			
10.00				63.00			
30.00				1031.00			
10.00				1144.00			
291.25			120.25	369.82	44471.38	120.25	44471.38
31.50			17.25	2762.58	47654.42	17.25	47654.42
63.00			34.50	2790.02	96255.62	34.50	96255.62
204.47			190.21	6594.11	1254266.20	190.21	1254266.20

1442647.62

Item no	Description of work	Unit
45	Providing and laying cement concrete using 20mm and down size granite coarse aggregates and fine aggregates of ready mixedf concrete for RCC works laid in 15 cms thick layers and well compated including vibrating, curing,etc., with all lead and lifts etc complete(excluisive of cost of steel and fabrication charges) Ready Mixed Cement Concrete for Beams, Staircase and Roof with M-25(for Side Walls and Bottom)	Sqm
46	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as Walls at any thickness, incluidng attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specfiications.	Sqm
47	Providing Ceramic tiles of approved make shade and size for flooring, treads of steps and landings laid on a bed of 12mm thick, cement mortar 1:3 mix, flush pointing with white cement using colour pigment, including cost of materials, labour, curing, complete as per specifications.of size 30 x 30 cms 6mm thick	Sqm
48	Providing pre cast urocon tiles, red colour for footpath 20mm thickusing marble chilps at 7-10 nominalsize laid on bed CM 1:3 mix & jointd with red oxide cement slurry mixed pigment to match the shade of tiles, rubbing polishing , oxalicacid was, wax polish including cost of all materials and labour (Approved Rates)	Sqm
49	Providing and constructing precast concrete Solid Blocks with compressive strength not less than 35 kg/sqm with cement mortar 1:4 masonry (quion, jamb, closer blocks) with Solid Concrete Blocks of size 40x20x20cms confirming to I.S 2185/1965 in Superstructure including cost of all materials, labour charges, scaffolding, curing complete as per specifications.	Sqm
50	Providing TMT Steel Reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.TMT Bars Fe 500with all lead and lift and directions of the Engineer-In-charge of the work	Qtl
51	Providing 18mm thick cement plaster in single coat with cement mortar 1:4, to brick masonry including rounding off corners wherver required smooth rendering, : Providing and removing scaffolding, cost of materials, labour, curing complete as per specifications and direction of the Engineer in charge Providing lime rendering for plastering to wall and ceiling including cost of mate3rials labour curing complete as per specifications Internal wall platering with all lead and lift and directions of the Engineer-In-charge of the work	Sqm
52	Providing ACE paint to external walls of approved colour and shade over prime's coat.after brooming & cleaning the surface and applying two coats of ACE paint with cost of all material,labour,lead lift with loading unloading etc.complete as per direction of Engineer in charge of work.(Approved rates)	Sqm
53	Providing and fixing to wall, ceiling and floor, low density polyethylene pipes 6.00 kgf/s.cm working pressure 160mm outside diameter, compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all materials, labour charges, HOM of equipments and testing, excluding cost of fittings, complete as per specifications. (2 runs)	Rmt
54	Providing and constructing granite / trap / basalt Size Stone Masonry in cement mortar 1:6, stone hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of maerials, labour, curing with all lead and lifts, hire charges of machinaries, loading, unloading, levelling as per specification and direction of the Engineer-in-charge	cum